



INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/11496

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B24B1/00 B24B21/04 B08B1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B24B B08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 989 764 A (PETERSON RUBEN O) 27 June 1961 (1961-06-27) the whole document	1, 37, 38
X	EP 1 106 102 A (MINNESOTA MINING & MFG) 13 June 2001 (2001-06-13) page 27, line 5	37
A	DE 197 39 895 A (ZIEMEK GERHARD DR ING) 25 March 1999 (1999-03-25) cited in the application the whole document	1-38
A	GB 892 655 A (ERWIN MURSCHEL; KARL MESCHER) 28 March 1962 (1962-03-28) column 1; figure 2	1, 38
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

19 January 2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2 934 863 A (PENDERGAST RAYMOND F) 3 May 1960 (1960-05-03) column 3; figure 5	1, 38

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International Application No

PCT/EP 03/11496

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2989764	A	27-06-1961	GB 900724 A	11-07-1962
EP 1106102	A	13-06-2001	US 5679067 A	21-10-1997
			EP 1106102 A2	13-06-2001
			AT 207716 T	15-11-2001
			AU 5568496 A	18-11-1996
			BR 9608221 A	01-06-1999
			CA 2218245 A1	31-10-1996
			DE 69616539 D1	06-12-2001
			DE 69616539 T2	06-06-2002
			EP 0822768 A1	11-02-1998
			JP 2001502185 T	20-02-2001
			NO 974971 A	29-12-1997
			TW 384213 B	11-03-2000
			WO 9633638 A1	31-10-1996
			US 6261156 B1	17-07-2001
			US 5915436 A	29-06-1999
			US 6126533 A	03-10-2000
			US 6352471 B1	05-03-2002
			US 5903951 A	18-05-1999
DE 19739895	A	25-03-1999	FR 2768954 A3	02-04-1999
			DE 19739895 A1	25-03-1999
			CA 2247215 A1	11-03-1999
			DE 29717046 U1	04-12-1997
			US 6321431 B1	27-11-2001
GB 892655	A	28-03-1962	NONE	
US 2934863	A	03-05-1960	GB 896170 A	09-05-1962